Please add the following new claims:

30. A method for inducing the formation and/or maintenance of chondrocyte and/or cartilaginou tissue said method comprising the administration of a composition of claim 20.

31. A method for treating rheumatoid arthritis said method comprising administering a protein c claim 18 to a patient in need of same.

32. A method for treating osteoarthritis said method comprising administering a protein of clai 18 to a patient in need of same.

REMARKS

As pointed out to the Examiner during a phone conversation, there are typographical erro in the office action, however in most cases Applicants' Attorney was able to decipher th Examiner's intention and discussed with the Examiner those errors which were ambiguous. Clai 20 has been amended, as further discussed below, and new claims 30 -33 (dependent on claims 2 and 18, respectively) have been added. Basis for claims 30-33 appears in the specification f example on page 19 through 22. No new matter has been added, and no new issues are raised b the claims.

The claims as now presented are reproduced in Appendix A attached hereto for th Examiner's convenience.

Rejection Under Section 112, First Paragraph

Claim 20 is rejected under 35 U.S.C. § 112, first paragraph, for a perceived lack o enablement. Applicants do not acquiesce in the rejection, but have amended the claims in an effo

to further advance prosecution. Claim 20 as amended is directed to a composition for the formatio and/or maintenance of chondrocyte and/or cartilaginous tissue. Applicants reserve the right t pursue previously claimed and other subject matter disclosed in the application in one or mor continuing applications. Applicants submit that amended claim 20 is enabled finding support, fo example, at page 19 of the specification, wherein it is disclosed that human SDF-5 has applicatio in the induction, formation, growth, differentiation, proliferation and/or maintenance and healin of cells and tissues such as chondrocyte and/or cartilaginous tissue. Such a preparation employin human SDF-5 protein may have prophylactic use in treatment of rheumatoid arthritis an osteoarthritis and traumatic injury to cartilage. The preparation and formulation of therapeuti compositions comprising human SDF-5 is described on pages 21 and 22, and the dosage regime for administration of SDF-5 is described on page 22. Moreover, Example 3 of the specificatio describes the Rosen-modified Sampath-Reddi assay, which provides an *in vivo* assay for evaluatin bone, cartilage, and/or other connective tissue activity of SDF-5.

Claim 28 is rejected for lack of enablement for the reasons recited with respect to claim 2 Applicants do not acquiesce in the rejection , but in an effort to further advance prosecution hav amended claim 28 to depend from amended claim 20 thereby overcoming the rejection.

Provisional Double-Patenting Rejection

Claims 18-20, 22,23 and 25 are provisionally rejected under the judicially created doctrin of double patenting over claims 18-20, 22, 23 and 25 of copending application No. 08/848,439. Applicants note that this is a provisional rejection and upon allowance of conflicting claims in th present application Applicants will cancel claims drawn to the proteins and compositions there in the copending applicati n which is currently under suspension. Claim 19 is a product- by

process claim and therefore Applicants will maintain this claim in one of the pending application and upon allowance cancel the conflicting claim.

CONCLUSION

In view of the foregoing remarks and amendments, Applicants respectfully request issuanc of pending claims 18-20, 22-23, 25 and 28-32. Should the Examiner believe that a telephoni interview would assist in clarifying any remaining issues, or to otherwise expedite prosecutio Applicants respectfully invite the Examiner to call the undersigned attorney at the telephone numbe provided below.

If any fee is due with regard to this paper, Applicants hereby authorize payment of such fe from Deposit Account No. 07-1060.

Respectfully submitted,

Ellen J. Kapinos

Ellen J. Kapinos
Reg. No. 32,245
Attorney for Applicants
(617) 665-8769

Genetics Institute, Inc.
87 CambridgePark Drive
Cambridge, MA 02140

Home #
413-535-2237
OK to call
there - she
works at home

Appendix A

18. A purified human SDF-5 polypeptide comprising an amino acid sequence of SE ID NO: 2 or SEQ ID NO: 3.

19. A purified human SDF-5 protein produced by the steps of
(a) culturing a cell transformed with a DNA molecule comprising the nucleotide sequenc from nucleotide #316 to #1143 as shown in SEQ ID NO:1; and
(b) recovering and purifying from said culture medium a protein comprising the amino aci sequence from amino acid #21 to amino acid #295 as shown in SEQ ID NO:2.

20. A composition for the formation and/or maintenance of chondrocyte and/c cartilagineous tissue in a patient in need of same comprising a therapeutic amount of the huma SDF-5 protein according to claim 19.

22. A purified human SDF-5 protein comprising the amino acid sequence from amino aci #1 to #295 of SEQ ID NO:2.

23. A purified human SDF-5 protein comprising the amino acid sequence from amino aci #1 to #275 of SEQ ID NO:3.

25. A purified human SDF-5 protein having a molecular weight of about 30 to about 35 k said protein comprising the amino acid sequence of SEQ ID NO:3 and having the ability to regula the transcription of one or more genes.

28. The pharmaceutical composition of claim 20 further comprising a pharmaceuticall acceptable carrier.

29. A purified human SDF-5 polypeptide comprising an amino acid sequence selecte from the group consisting of:
(a) amino acids 1, 18, 19, 20, 21, 22, 23, 24 or 25 to 295 of SEQ ID NO: 2; and
(b) amino acids 1 to 275 of SEQ ID NO:3.

30. A method for inducing the formation and/or maintenance of chondrocyte and/c cartilaginous tissue said method comprising the administration of a composition of claim 20.

31. A method for treating rheumatoid arthritis said method comprising administering a protein of claim 18 to a patient in need of same.

32. A method for treating osteoarthritis said method comprising administering a protein of claim 18 to a patient in need of same.